



Space, Missile, Command, and Control

MR AND TAC PERSONNEL MASTER QUESTION FILE

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This pamphlet implements AFI 13-102, *Air Support Operations Center (ASOC) and Tactical Air Control Party (TACP) Training and Evaluation Procedures*. It contains a bank of questions, answers and source references used during the mission status certification process to ensure individuals possess needed skills and knowledge. The information in this study guide applies to individuals filling ASOC and TACP duty positions and units conducting training and evaluation of personnel performing Terminal Attack Control duties. Actual testing will begin 1 December 1997.

1. The \_\_\_\_\_ is an operational component of the Tactical Air Control System (TACS) under the operational control of the Interim Combined Air Operations Center.

- a. Battlefield Coordination Element (BCE)
- b. Air Support Operations Center (ASOC)
- c. Air Operations Coordination Center (TACC)
- d. Tactical Air Control Party (TACP)

Answer: B Ref: AIRCENT 80-2 para 2-4

2. The ASOC assists the corps staff plan for executing \_\_\_\_\_.

- a. Theater J-SEAD
- b. Localized J-SEAD
- c. Campaign J-SEAD
- d. Complimentary J-SEAD

Answer: B Ref: AFI 13-106 para 1.2.3

3. When the \_\_\_\_\_ receives an air support request it will begin concurrent coordination and planning?

- a. Battalion Tactical Air Control Party
- b. Theater Air Control Center
- c. Air Operations Center
- d. ASOC

Answer: D Ref: AFI 13-106 para 1.2

4. The ASOC coordinates air support with organic Army air defense organizations through the corps \_\_\_\_\_.

- a. Fire Support Element
- b. Battlefield Coordination Element
- c. Army Airspace Command and Control Element
- d. Army Airspace Command, Control, and Communication Element

Answer: C Ref: AFI 13-106 para 1.2.4

5. When deployed, who do TACPs operationally report to?

- a. G-1
- b. Division Commander
- c. Air Operations Center
- d. Air Support Operations Center

Answer: D Ref: AFI 13-106 para 2.1

6. The USAF aligns TACPs with Army combat maneuver units from \_\_\_\_\_ through battalion and squadron.

- a. Field Army
- b. Corps
- c. Division
- d. Brigade

Answer: B Ref: AFI 13-106 para 2.1.1

7. TACP operations fall into two general categories: \_\_\_\_\_ and \_\_\_\_\_.

- a. liaison, control
- b. planning, execution
- c. centralized control, decentralized execution
- d. decentralized control, centralized execution

Answer: A Ref: AFI 13-106 para 2.2.1

8. Which of the following is not a general function of a TACP?

- a. Assist the Army commander and staff in planning for air support operations.
- b. Advise the Land Component Commander on the capabilities and limitations of TACAIR.
- c. Operate and maintain TACP communications equipment to support the Air Force Air Request Net, Tactical Air Direction Nets, Airlift Advance Notification/Coordination Net (TALO).
- d. Provide coordination and attack planning for J-SEAD operations, targets of opportunity when authorized in the Rules Of Engagement (ROE), and targets in position for near term effect on friendly forces.

Answer: B Ref: AFI 13-106 para 2.2.2

9. In recognizing aircraft, WEFT stands for \_\_\_\_\_.

- a. Wings, Engines, Forward sections, Tail
- b. Wings, Engines, Forward view, Tail View
- c. Wings, Engines, Fuselage, Tail
- d. none of the above

Answer: C Ref: FM 44-80 pg. 3-1

10. Which is not a function of the FSCOORD?

- a. Maintains the status capabilities and limitations of all fire support.
- b. Adds in maneuver expertise by participating in the prepared fire support plans.
- c. Assigns fire missions to the most effective agency.
- d. Receives request for support and evaluates them against other fire support requirements.

Answer: B Ref: FM 6-20-30 appendix A, pg. 16-17

11. Which of the following is not true of fire support coordination measures.

- a. Provide safe-guards for friendly forces.
- b. With the exception of boundaries, are either permissive or restrictive.
- c. Designed to facilitate the rapid engagement of targets.
- d. With the exception of boundaries, are always restrictive

Answer: D Ref: FM 6-20-20 pg. 1-18

12. Which of the following is a permissive method of fire support coordination?

- a. Air Space Coordination Area
- b. No-Fire Area
- c. Coordinated fire line
- d. Restrictive fire line

Answer: C Ref: USAFE P 50-9 pg. 57

13. A restrictive fire area is \_\_\_\_\_.

- a. an area in which specific restrictions are imposed. Fires that exceed restrictions are prohibited
- b. an area established between two converging forces
- c. an area in which any weapon system can fire conventional or improved munitions
- d. an area in which no fires or the effects of fires are allowed

Answer: A Ref: USAFEP 50-9 pg. 58

14. In a no-fire area, the commander must get clearance from the establishing headquarters to defend against incoming fire from within the no-fire area.

- a. True
- b. False

Answer: B Ref: USAFEP 50-9 pg. 58

15. Which best describes an airspace coordination area?

- a. It is a permissive fire support coordination method.
- b. A three-dimensional block of airspace in which friendly aircraft are reasonably safe from enemy air defense systems.
- c. A three-dimensional block of airspace in which friendly aircraft are reasonably safe from friendly surface fires.
- d. A three-dimensional block of airspace in which friendly aircraft cannot fly.

Answer: C            Ref: USAFEP 50-9 pg. 58

16. What is the minimum distance between targets using lateral separation for CAS aircraft and ground firing units?

- a. 500 feet
- b. 500 meters
- c. 1000 feet
- d. 1000 meters

Answer: B            Ref: JP 3-09.3 pg. IV-12

17. What CAS deconfliction method is the most restrictive to aircraft?

- a. Lateral separation
- b. Altitude separation
- c. Timed separation
- d. Altitude and Lateral separation

Answer: D            Ref: JP 3-09.3 pg. IV-13

18. Which CAS deconfliction method requires the most detailed coordination?

- a. Lateral Separation
- b. Timed Separation
- c. Altitude separation
- d. none of the above

Answer: B            Ref: JP 3-09.3 pg. IV-13

19. "Danger Close" is announced when the target (or round will impact) within \_\_\_\_\_ of friendly troops.

- a. 1600 feet
- b. 1600 meters
- c. 600 feet
- d. 600 meters

Answer: D            Ref: FM 6-30 pg. 4-4

20. Which of the following is used in the warning order of an artillery call-for-fire?

- a. Adjust fire/fire for effect
- b. Adjust fire/danger close
- c. Fire for effect/danger close
- d. At my command/time on target

Answer: A            Ref: USAFEP 50-9 pg. 12

21. Which of the following is NOT passed in the second transmission(target location) of a call-for-fire?

- a. Polar Plot
- b. Grid coordinates
- c. Target description
- d. Shift from a known point

Answer: C            Ref: USAFEP 50-9 pg. 12

22. Which of the following is not passed in the message to observer transmission?

- a. Units to fire
- b. any changes to the call-for-fire
- c. target number
- d. method of fire control

Answer: D Ref: USAFEP 50-9 pg. 15

23. "Left" and "Right" along with distance in feet is used to adjust left or right.

- a. True
- b. False

Answer: B Ref: USAFEP 50-9 pg. 13

24. For adjustment purposes the observer may use \_\_\_\_\_.

- a. gun-target
- b. observer-target line
- c. both a & b
- d. none of the above

Answer: C Ref: USAFEP 50-9 pg. 14

25. Which of the following helicopters can provide a laser mark for fighter aircraft?

- a. OH-58D
- b. AH-64
- c. AH-1
- d. both a & b

Answer: D Ref: USAFEP 50-20 pg. B-1

26. Which of the following are important planners for JAAT operations?

- a. FSO
- b. TACP/ALO
- c. G/S-3, G/S-2
- d. all of the above

Answer: D Ref: USAFEP 50-20 pg. 2-3

27. The two JAAT employment options are?

- a. random
- b. sectored
- c. combined
- d. both b and c

Answer: D Ref: USAFEP 50-20 pg. 3-1

28. Simultaneous, sequential, and random are timing options when conducting a JAAT.

- a. True
- b. False

Answer: A Ref: USAFEP 50-20 pg. 3-1

29. Who executes the JAAT engagement?

- a. AMC
- b. FSO
- c. G/S-2
- d. G/S-1

Answer: A Ref: USAFEP 50-20 pg. 1-2

30. Dedicated A2C2 elements are located at what organizations?

- a. Division and Corps
- b. Division, Corps, BCE, and CRC
- c. Aviation brigade, Division, AOC, LCC
- d. FOC, Field Army, WOC, Division

Answer: A Ref: FM 100-103 pg. 4-6

31. In most cases, the airspace Control Authority is also the \_\_\_\_\_.

- a. Ground Component Commander
- b. Joint Forces Commander
- c. Director of the CRC
- d. The Joint Forces Air Component Commander

Answer: D Ref: FM 100-103 pg. 1-2

32. The airspace control center is the focal point for \_\_\_\_\_ responsibilities.

- a. BCE
- b. ACA
- c. CRC
- d. TACC

Answer: B Ref: FM 100-103 pg. 1-10

33. Where is ACO execution monitored from?

- a. The Combat Operations section of the ACC
- b. The Combat Plans section of the AOC
- c. The Combat Operations section of the BCE
- d. The Airspace Management Division of the CRC

Answer: A Ref: USAFEP 50-38 pg. B-3

34. Procedural control uses a network of ground and airborne radar assets to track and direct aircraft.

- a. True
- b. False

Answer: B Ref: FM 100-103 pg. 2-4

35. What type of control is indicated by the use of ROA's and SAAFR's?

- a. Positive
- b. Direct
- c. Procedural
- d. Indirect

Answer: C Ref: USAFEP 50-38 pg. 4-3

36. SAAFR's are standard routes who's altitudes are \_\_\_\_\_ the coordinating altitude.

- a. above
- b. within 500 ft of
- c. equal to
- d. below

Answer: D Ref: FM 100-103 pg. 2-14

37. ACA's require approval from the \_\_\_\_\_ if they are to be published in the ACO.

- a. Corps G-3 Air
- b. BCE
- c. Airspace Control Authority
- d. A2C2

Answer: C Ref: FM 100-103 pg. 2-7

38. What type of control measure is employed in the launch and recovery areas of every RPV?

- a. ACA
- b. ROZ
- c. NFA
- d. HIDACZ

Answer: B Ref: FM 100-103 pg. 2-12

39. A "Heading Direct" restricts the aircraft to within \_\_\_\_\_ NM of either side of the IP-to-TGT run-in.

- a. 1
- b. 2.5
- c. .5
- d. 2

Answer: D Ref: USAFEP 50-38 pg. E-7

40. The air tasking cycle begins with Joint Force Commander's \_\_\_\_\_ being sent out.

- a. Allocation/Request Message
- b. Apportionment/Guidance Message
- c. Sortie Allotment Message
- d. Air Tasking Order

Answer: B Ref: USAFEP 50-54 pg. 7-9

41. The process, completed by air capable components, of translating the apportionment decision into numbers of sorties is called \_\_\_\_\_.

- a. Allocations
- b. Apportionment
- c. Sortie Allotment
- d. Sortie Request

Answer: A Ref: USAFEP 50-54 pg. 7-9

42. The JFACC reviews each service component's \_\_\_\_\_ and prepares a sortie allotment message.

- a. Sortie Allotment Projection
- b. Air Support Request Message
- c. Allocation/Request Message
- d. Apportionment Guidance Message

Answer: C Ref: USAFEP 50-54 pg. 7-12

43. The ATO is sent out \_\_\_\_\_ prior to the tasking day.

- a. 24 hours
- b. 18 hours
- c. 12 hours
- d. 6 hours

Answer: C                      Ref: USAFEP 50-54 pg. 7-12

44. \_\_\_\_\_ is an order that tasks units to send aircraft to target area at specific times with prescribed ordnance loads.

- a. Allocation/Request Message
- b. Air Tasking Order
- c. Allotment Order
- d. Allocation Order

Answer: B                      Ref: USAFEP 50-54 pg. 7-9

45. \_\_\_\_\_ can be found in the ATO.

- a. Mission Data
- b. Mission Location
- c. Target Location
- d. all of the above

Answer: D                      Ref: USAFEP 50-54 pg. 7-9

46. The Air Operations Center (AOC) will be working with \_\_\_\_\_ ATO/ATOs.

- a. only one
- b. one but no more than two at any one time
- c. three or more
- d. None. The AOC does not deal with the ATO process

Answer: C                      Ref: USAFEP 50-54 pg. 7-10

47. What type of polarization do most tactical radio sets use?

- a. horizontal
- b. vertical
- c. elliptical
- d. omnidirectional

Answer: B                      Ref: FM 24-18 pg. 3-36

48. Which portion of the ground wave travels through the atmosphere from one antenna to another?

- a. skywave
- b. direct wave
- c. surface wave
- d. ground reflected wave

Answer: B                      Ref: FM 24-18 pg. 2-8

49. Which of the following is not a component of the ground wave?

- a. direct wave
- b. ground reflected wave
- c. sky wave
- d. surface wave

Answer: C                      Ref: FM 24-18 pg. 2-8



50. Which ionospheric region's main effect is to capture HF waves, hindering skywave propagation?

- a. F2
- b. F1
- c. E
- d. D

Answer: D Ref: FM 24-18 pg. 2-10

51. Which irregular variation of the ionosphere coincides with bright solar eruptions and causes receivers to go dead?

- a. sporadic E
- b. daily disturbances
- c. seasonal disturbances
- d. sudden ionospheric disturbance

Answer: D Ref: FM 24-18 pg. 2-11

52. What is the length of wire required (in feet) for one side of a dipole antenna at a frequency of 4 Mhz?

- a. 28' 6"
- b. 58' 6"
- c. 117'
- d. 224'

Answer: B Ref: FM 24-18 pg. 3-10

53. Which of the following antennas is good for short range (<500 miles) skywave propagation and is truly omni-directional?

- a. half-wave dipole
- b. AS-2259 NVIS
- c. inverted L
- d. both b & c

Answer: B Ref: FM 24-18 Appendix M

54. The 60mm mortar max range is?

- a. 3,500m
- b. 4,789m
- c. 5,650m
- d. none of the above

Answer: A Ref: USAFEP 50-9 pg. 11

55. The 107mm (4.2") mortar max range is?

- a. 3,500m
- b. 4,789
- c. 5,650
- d. none of the above

Answer: C Ref: USAFEP 50-9 pg. 11

56. Which of the following best describes High Explosive Fuze Quick (HE/Q)?

- a. Burst in the air at a given time.
- b. Radio activated, detonates at a predetermined time.
- c. Burst on impact.
- d. 0.05 second delay

Answer: C Ref: FM 6-30 pg. 4-9

57. What does CP stand for when used with HE?

- a. Command Post
- b. Concrete Piercing
- c. Common Plastic
- d. Conventional Personnel

Answer: B Ref: FM 6-30 pg. 4-10

58. What targets would HE/VT be used for?

- a. Earth and log emplacements, bunkers and buildings
- b. Targets in trees and tanks
- c. Personnel in the open and tanks
- d. Personnel in open and light armored vehicles

Answer: D Ref: FM 6-30 pg. E-5

59. Which is not a use for WP?

- a. Adjusting
- b. Marking
- c. Obscuring
- d. Screening

Answer: A Ref: FM 6-30 pg. 4-11

60. Smoke does not affect the capability of NVG and IR devices.

- a. True
- b. False

Answer: B Ref: FM 6-30 pg. 6-13

61. What best describes Copperhead?

- a. Non-guided weapon with a high hit probability
- b. Wire-guided weapon with a high hit probability
- c. Laser-guided weapon with a high hit probability
- d. Infra-red-guided weapon with a high hit probability

Answer: C Ref: FM 6-30 pg. 4-11

62. What does DPICM stand for?

- a. Dense personnel improved conventional mine
- b. Dead personnel improved conventional munition
- c. Dual purpose improved conventional munition
- d. Dual purpose improved conventional mine

Answer: C Ref: FM 6-30 pg. 6-1

63. What are four uses of an illuminating shell?

- a. Harassment, adjust artillery, mark, and illuminating targets
- b. Harassment, adjust artillery, mark, and illuminating friendlies
- c. Mark and illuminate targets, adjust artillery, and destruction of the enemy
- d. Mark and illuminate targets, adjust artillery, and neutralization of the enemy

Answer: A Ref: FM 6-30 pg. 6-7

64. Normal ADAMs and RAAMS are fired together to form anti-tank obstacles difficult for dismounted troops to breach.

- a. True
- b. False

Answer: A Ref: FM 6-30 pg. 4-11

65. Which caliber/s can fire Copperhead?

- a. 105mm only
- b. 155mm only
- c. 105mm and 155mm
- d. 155mm and 203mm

Answer: B Ref: FM 6-30 pg. 4-11

66. All artillery/mortars can fire WP and ILLUM?

- a. True
- b. False

Answer: B Ref: USAFEP 50-9 pg. 10 & 11

67. Available cartridges for the 7.62 are?

- a. Ball only
- b. Ball and tracer
- c. Ball, armor piercing, armor piercing incendiary, and tracer
- d. Ball, armor piercing, and tracer

Answer: D Ref: FM 21-75 pg. G-3

68. The 40mm Grenade (commonly used with the M203) fires ground smoke which is used for marking and screening.

- a. True
- b. False

Answer: B Ref: FM 21-75 pg. G-4

69. The 127mm (M47 DRAGON) anti-tank round is infra-red guided?

- a. True
- b. False

Answer: B Ref: FM 21-75 pg. G-8

70. Risk-estimate distances are computed using which of the following?

- a. Attacks perpendicular to the FLOT using a dug in soldier
- b. Attacks parallel to the FLOT using a dug in soldier
- c. Attacks perpendicular to the FLOT using a prone soldier
- d. Attacks parallel to the FLOT using a prone soldier

Answer: D Ref: JP 3-09.3 Appendix G pg. 1, para 2&5

71. Risk-estimates are for peacetime training?

- a. True
- b. False

Answer: B Ref: JP 3-09.3 Appendix G pg. 1, para 1

72. Which characteristics best describe the use of guns?

- a. are accurate but not recommended for close-in work
- b. are in-accurate and not recommended for close-in work
- c. have pinpoint accuracy for close-in work
- d. are useless in air to ground role

Answer: C Ref: CDC 1C451 Vol 2 Chap 4, pg. 2

73. Which characteristic does not apply to slick bombs?

- a. can be delivered as low as 200 feet
- b. slow down very little after release
- c. detonate almost directly under the aircraft
- d. have standard tail fins

Answer: A Ref: CDC 1C451 Vol 2 Chap 4, pg. 4

74. Using a MK-83 with a delayed fusing would provide?

- a. Max blast and fragmentation using a 2000lbs bomb
- b. Max blast and fragmentation using a 1000lbs bomb
- c. Penetration and cratering using a 2000lbs bomb
- d. Penetration and cratering using a 1000lbs bomb

Answer: D Ref: CDC 1C451 Vol 2 Chap 4, pg. 4

75. Which CBU is effective against armor?

- a. CBU 52 and CBU 58
- b. CBU 87 and CBU 58
- c. MK 20 and CBU 87
- d. MK 20 and CBU 52

Answer: C Ref: CDC 1C451 Vol 2 Chap 4, pg. 4

76. When planning a CAS mission, you should consult the \_\_\_\_\_ for a detailed assessment of local threats, enemy forces, and their possible course of action.

- a. S-2
- b. S-3
- c. S-3 Air
- d. Ground Commander

Answer: A Ref: TACP 50-22 pg. 12-13

77. Which of the following aircraft/artillery separation plans divides the target area into two or more engagement zones?

- a. timed
- b. sectorized
- c. lateral
- d. altitude

Answer: C Ref: TACP 50-22 pg. 41

78. Operational success of a CAS mission is measured in terms of \_\_\_\_\_.

- a. target destruction and weapon selection
- b. adequate coordination and weapons accuracy
- c. weapons selection and accuracy of delivery
- d. target destruction and friendly force survival

Answer: D Ref: JP 3-09.3 pg. IV-3

79. Who establishes the time difference between preplanned and immediate CAS requests?

- a. Land Component Commander
- b. Air Component Commander
- c. ASOC director
- d. Division Commander

Answer: B Ref: JP 3-09.3 pg. III-1

80. Where would you receive the specific mission on an immediate request such as mission number, call sign, ordnance, etc.. prior to the mission being flown?

- a. DD form 1972 (REVISED), Section III
- b. DD Form 1972, Section II
- c. Special Instructions (Spins)
- d. FSO

Answer: A Ref: JP 3-09.3 Pg. C-6

81. For an immediate CAS Request, who is the final approval authority?

- a. ASOC director
- b. Air Operations Center
- c. Corps G-3 Air
- d. Ground Commander

Answer: D Ref: JP 3-09.3 pg. III-3/4

82. What is the proper term to use when you are approving live ordnance to be expended on an individual pass?

- a. Cleared Dry
- b. Cleared Hot
- c. Expenditure approved
- d. Continue dry

Answer: B Ref: TACP 50-22 pg. 19

83. Lasers emit laser energy with a \_\_\_\_\_.

- a. primary response frequency
- b. primary repetition frequency
- c. pulse repetition frequency
- d. pulse response frequency

Answer: C Ref: JP 3-09.1 Chap 4

84. The Pave Penny Pod is a \_\_\_\_\_.

- a. passive laser tracker
- b. laser designator
- c. infrared sensor
- d. forward looking IR radar

Answer: A Ref: JP 3-09.1 Annex 6

85. Pave Spike can be found on which aircraft?

- a. F-111F
- b. F-16A, A-10
- c. OA-10, A-10
- d. F-4E

Answer: D Ref: JP 3-09.1 Annex 7

86. PAVEWAY I, II, III are \_\_\_\_\_.

- a. Laser guided missiles
- b. Laser guided projectiles
- c. Laser guided rockets
- d. Laser guided bombs

Answer: D Ref: JP 3-09.1 Annex 20

87. PAVEWAY III requires \_\_\_\_\_.

- a. ideally continuous laser during flight but minimum of 10-14 seconds before impact
- b. 5 seconds before impact
- c. 30 seconds before impact
- d. continuous laser energy during flight

Answer: A Ref: JP 3-09.1 Annex 21

88. Which of the following is a laser guided missile?

- a. Copperhead
- b. PAVEWAY I
- c. PAVEWAY III
- d. AGM-65E

Answer: D Ref: JP 3-09.1 Annex 19

89. During the GFAC to fighter brief, ensure fighters acknowledge \_\_\_\_\_ locations.

- a. friendly
- b. enemy
- c. command and control
- d. signal

Answer: A Ref: JP 3-09.1 Chap 1, pg. 1-4

90. Pulse repetition frequency codes for ground designators are \_\_\_\_\_ digits.

- a. 1
- b. 2
- c. 3
- d. 4

Answer: C Ref: JP 3-09.1 Chap IV-2

91. The direction of attack must maintain a \_\_\_\_\_ degree safety zone on either side of the LTD to target line.

- a. 10
- b. 20
- c. 30
- d. 40

Answer: A Ref: JP 3-09.1 Chap III-1

92. \_\_\_\_\_ is the most critical element of night CAS operations.

- a. friendly locations
- b. enemy location
- c. command and control location
- d. signal location

Answer: A Ref: JP 3-09.3 Chap V-15

93. The LUU-2 is a/an \_\_\_\_\_ .

- a. IR pointer
- b. IR strobe
- c. IR rocket
- d. illuminating flare

Answer: D Ref: JP 3-09.3 Chap E-3

94. \_\_\_\_\_ is the call made to illuminate the aircraft with IR pointer.

- a. rope
- b. visual
- c. contact
- d. snake

Answer: A Ref: JP 3-09.3 Chap V-14

95. A \_\_\_\_\_ call is made by the aircraft to the TAC when the IR pointer is used to mark the target.

- a. contact
- b. snake
- c. sparkle
- d. steady

Answer: C Ref: JP 3-09.3 Chap V-14

96. \_\_\_\_\_ call is used to turn IR beam off.

- a. terminate
- b. end
- c. finish
- d. stop

Answer: D Ref: JP 3-09.3 Chap V-14

97. The A-10 is \_\_\_\_\_.

- a. NVG and covert lighting capable
- b. not NVG or covert lighting capable
- c. NVG but not covert lighting capable
- d. Not NVG capable but have covert lighting

Answer: A Ref: JP 3-09.3 Appendix E-1

98. The F-16C Block 40/42 has \_\_\_\_\_ to acquire targets at night.

- a. Pave Tack
- b. Pave Penny
- c. LANTIRN
- d. Forward-looking IR Radar

Answer: C Ref: JP 3-09.3 Appendix E-2

99. \_\_\_\_\_ is a call made when the pilot sees the target.

- a. Tally
- b. contact
- c. confirmed
- d. rope

Answer: A Ref: JP 3-09.3 Chap V-14

100. Which of the following aircraft is NVG capable?

- a. F-111F
- b. F-16A
- c. F/A-18
- d. B1-B

Answer: C Ref: JP 3-09.3 Appendix E-3

101. 1.6 kilometers is equal to how many miles?

- a. .62
- b. 1.0
- c. 1.6
- d. 2.2

Answer: B Ref: FM 21-26 pg. 12-1

102. The HMMWV can traverse grades as steep as what percent?

- a. 30%
- b. 40%
- c. 60%
- d. 70%

Answer: C Ref: 36A12-1A-2091-1 pg. 1-6

103. With a deep water fording kit, the HMMWV can ford water crossings of how deep?

- a. 60 inches
- b. 50 inches
- c. 30 inches
- d. 20 inches

Answer: A Ref: 36A12-1A-2091-1

104. When preparing to move, what is the first thing you should do?

- a. Plot finish point and checkpoints
- b. Plot checkpoints and start points
- c. Plot start and end point
- d. Plot possible checkpoints

Answer: C Ref: FM 21-26 pg. 12-2

105. What is the most commonly used method of navigation?

- a. Polar
- b. Terrain association
- c. Gridline analysis
- d. A combination of b and c

Answer: B Ref: FM 21-26 pg. 12-3

106. Considering moving tactics, which of the following should be done?

- a. Avoid skylining and select a concealed route
- b. Choose the most difficult terrain to follow
- c. Choose the easiest most direct route
- d. none of the above

Answer: A Ref: FM 21-26 pg. 12-3



107. When in a vehicle, what can you use to measure distance?

- a. Speedometer
- b. Protractor
- c. Odometer
- d. Compass

Answer: C Ref: FM 21-26 pg. 5-8

108. A 6-digit grid coordinate is accurate to within how many meters?

- a. 1,000
- b. 100
- c. 10
- d. 1

Answer: B Ref: FM 21-26 pg. 4-15

109. How many mils are in a 360 degree circle?

- a. 3,600
- b. 4,600
- c. 6,400
- d. 6,800

Answer: C Ref: FM 21-26 pg. 6-1

110. Which of the following denotes a 100,000 meter grid square identifier?

- a. 04Q
- b. 42S
- c. 4W3
- d. CS

Answer: D Ref: FM 21-26 pg. 4-14

111. What is the symbol for magnetic north?

- a. MN
- b. GN
- c. a half arrow
- d. a star

Answer: C Ref: FM 21-26 pg. 6-1

112. What is the back azimuth of 40 degrees?

- a. 140 degrees
- b. 180 degrees
- c. 200 degrees
- d. 220 degrees

Answer: D Ref: FM 21-26 pg. 6-2

113. What unit of measure is normally associated with your pace count?

- a. 200 meters
- b. 150 meters
- c. 100 meters
- d. 50 meters

Answer: C Ref: FM 21-26 pg. 5-8

114. Locating an unknown position from two or more known points is referred to as?

- a. triangle section
- b. cross section
- c. intersection
- d. resection

Answer: C Ref: FM 21-26 pg. 6-9

115. Locating your unknown position from two or more known positions is referred to as?

- a. triangle section
- b. cross section
- c. intersection
- d. resection

Answer: D Ref: FM 21-26 pg. 6-17

116. When navigating, a planned magnetic deviation to your objective is referred to as?

- a. predetermined offset
- b. deliberate offset
- c. delivery offset
- d. natural offset

Answer: B Ref: FM 21-26 pg. 9-6

117. What units of measure are normally indicated by the bar scale at the bottom of the map?

- a. Kilometers, Statute miles, and Nautical miles
- b. Kilometers, Statute miles, and Yards
- c. Kilometers, Statute miles, and Regular miles
- d. Kilometers, Statute miles, and Feet

Answer: A Ref: FM 21-26 pg. 5-2

118. How many satellites can the AN/PSN-11 continuously track at one time?

- a. 3
- b. 4
- c. 5
- d. 8

Answer: C Ref: TO 31R4-2PSN11-1 pg. 1-5

119. How many waypoints can be stored at one time in the PSN-11?

- a. 1
- b. 50
- c. 99
- d. 999

Answer: D Ref: TO 31R4-2PSN11-1 pg. D-12

120. What information does the position display on the PSN-11 provide?

- a. Current position
- b. Date
- c. Satellite usage summary
- d. All of the above

Answer: D Ref: TO 31R4-2PSN11-1 pg. 4-2

121. What functions can be performed while in the self-test mode?

- a. Anything off the menu display
- b. Navigation functions
- c. Position coordinates
- d. None of the above

Answer: D Ref: TO 31R4-2PSN11-1 pg. 3-6

122. What type of code signals can the PLGR accept with a proper fill and on HQ?

- a. Course acquisition
- b. Precise
- c. Encrypted
- d. All of the above

Answer: D Ref: 31R4-2PSN11-1 pg. 1-5

123. Which of the following methods is permitted to enter crypto keys into a PSN-11?

- a. Keypad
- b. KOI-18
- c. KYK-13
- d. Any of the above

Answer: D Ref: TO 31R4-2PSN-11-1 pg. 3-19

124. How long does the PSN-11 take to warm up from the "cold start" mode?

- a. Instantaneous
- b. 1-5 minutes
- c. 5-10 minutes
- d. 6-15 minutes

Answer: D Ref: TO 31R4-2PSN-11-1 pg. 3-23

125. Which navigation mode on the PSN-11 would be used for traveling on foot?

- a. Foot
- b. Slow
- c. 2D Fast
- d. 3D Fast

Answer: B Ref: TO 31R4-2PSN11-1 pg. 4-6

126. When operating the PSN-11, under dense foliage what can be done to acquire more satellites?

- a. Hook up external antenna
- b. Initialize
- c. Select AVG mode
- d. All of the above

Answer: C Ref: TO 31R4-2PSN11-1 pg. 4-19

127. The distance of a point north or south of the equator is called \_\_\_\_\_?

- a. latitude
- b. longitude
- c. Prime Meridian
- d. Equatorial

Answer: A Ref: FM 21-26 pg. 4-1

128. Lines of latitude run east-west, but are measured how?

- a. North and East
- b. North and West
- c. North and South
- d. South and East

Answer: C Ref: FM 21-26 pg. 4-1

129. Lines of longitude run north and south but are measured \_\_\_\_\_.

- a. North and West
- b. North and East
- c. East and West
- d. East and South

Answer: C Ref: FM 21-26 pg. 4-1

130. The Prime Meridian of the system we use runs through \_\_\_\_\_.

- a. Grethwin, England
- b. Glendalle, England
- c. Greenbon, England
- d. Greenwich, England

Answer: D Ref: FM 21-26 pg. 4-1

131. The distance east or west of the Prime Meridian is \_\_\_\_\_.

- a. Latitude
- b. Longitude
- c. The Equator
- d. The Prime Meridian

Answer: B Ref: FM 21-26 pg. 4-2

132. One degree equals \_\_\_\_\_ minutes.

- a. 30
- b. 40
- c. 50
- d. 60

Answer: D Ref: FM 21-26 pg. 4-2

133. What latitude is the north pole?

- a. 90 Degrees North
- b. 90 Degrees
- c. 180 Degrees North
- d. 180 Degrees South

Answer: A Ref: FM 21-26 pg. 4-2

134. The four lines (neatlines) that enclose the body of a map are called?

- a. Latitude and grid
- b. Longitude and grid
- c. Latitude and equatorial
- d. Latitude and longitude

Answer: D Ref: FM 21-26 pg. 4-2

135. The neatlines that border the map, are given in \_\_\_\_\_.

- a. Degrees
- b. Degrees and seconds
- c. Degrees and minutes
- d. Degrees and headings

Answer: C Ref: FM 21-26 pg. 4-2

136. In a Multi-color representation, what color indicates friendly and or enemy man-made obstacles?

- a. blue
- b. red
- c. yellow
- d. green

Answer: D Ref: FM 101-5-1 pg. 2-2

137. In a one color representation friendly symbols are outlined by \_\_\_\_\_.

- a. single line
- b. double lines
- c. no lines
- d. none of the above

Answer: A Ref: FM 101-5-1 pg. 2-2

138. A \_\_\_\_\_ line symbol indicates a future or projected location.

- a. solid
- b. broken
- c. black
- d. white

Answer: B Ref: FM 101-5-1 pg. 2-26

139. There are two primary types of boundaries, lateral, and \_\_\_\_\_.

- a. separate
- b. forward
- c. deep
- d. rear

Answer: D Ref: FM 101-5-1 pg. 2-32

140. When representing the symbol for the forward line of own troops (FLOT) which way do the bumps point toward?

- a. enemy
- b. friendlies
- c. both
- d. neither

Answer: A Ref: FM 101-5-1 pg. 2-34

141. When is it acceptable to use your own codewords?

- a. never
- b. anytime
- c. when there is no established codeword
- d. when you hear someone else use it

Answer: A Ref: FM 24-18 Chap 5

142. You should never use names or personal signs on the net.

- a. True
- b. False

Answer: A Ref: FM 24-18 Chap 5

143. What degree of loudness should you use when you speak into the microphone?

- a. yell into the handset
- b. speak clearly and concisely in natural tones
- c. whisper into the
- d. hold the handset as close to your mouth as possible

Answer: B Ref: FM 24-18 Chap 5

144. Which proword indicates: I have received your transmission satisfactorily?

- a. over
- b. relay
- c. roger
- d. correct

Answer: C Ref: FM 24-18 Chap 5

145. What is the meaning of the proword "OUT".

- a. station is out to lunch
- b. end of my transmission to you and no answer is expected
- c. station is out of range
- d. I must pause

Answer: B Ref: FM 24-18 Chap 5

146. A \_\_\_\_\_ is acquired when the enemy obtains three intersecting bearings on the radio transmitter.

- a. fix
- b. cut
- c. lock
- d. azimuth

Answer: A Ref: FM 24-18 pg. 6-2

147. Which of the following types of jamming is similar to normal background noise?

- a. stepped tones
- b. random noise
- c. random
- d. recorded sounds

Answer: B Ref: FM 24-33 pg. 3-2

148. Which of the following types of jamming is most effective?

- a. gulls
- b. spark
- c. wobbler
- d. stepped tones

Answer: B Ref: FM 24-33 pg. 3-2

149. Which of the following types of jamming is effective against secure equipment?

- a. random noise
- b. random pulse
- c. stepped tones
- d. preamble jamming

Answer: D Ref: FM 24-33 pg. 3-3

150. To determine if radio interference is caused by internal equipment problems you should?

- a. change frequencies
- b. ground your radio equipment
- c. disconnect your antenna
- d. both b & c

Answer: D Ref: FM 24-33 pg. 3-3

151. The best way to counter imitative electronic deception is through \_\_\_\_\_.

- a. authentication.
- b. placement of antennas.
- c. chattermark procedures.
- d. use of minimal transmission power.

Answer: A Ref: FM 24-35-1 pg. 112

152. \_\_\_\_\_ is power spread over several frequencies or channels at the same time.

- a. Spot jamming
- b. Stepped tones
- c. Barrage jamming
- d. Sweepthrough Jamming

Answer: C Ref: FM 24-33 pg. 3-2

153. \_\_\_\_\_ deception is the use of language experts and compatible radios by the enemy to enter a friendly net.

- a. Imitative
- b. Simulative
- c. Interception
- d. Manipulative

Answer: A Ref: FM 24-18 pg. 6-3

154. Who has authority to change frequencies while jamming is taking place?

- a. XO
- b. S-2
- c. ALO
- d. NCS

Answer: D Ref: FM 24-35-1 pg. 112

155. What are the two types of MIJI reports?

- a. Initial
- b. Routine
- c. Follow up
- d. both a & c

Answer: D Ref: FM 24-35-1 pg. 112

156. What section of the SOI can you find MEDEVAC procedures in?

- a. Index
- b. Pyrotechnic and smoke signals
- c. Supplemental instructions
- d. all of the above

Answer: C Ref: FM 24-35-1 Index 101

157. Training SOI used outside the United States and all wartime or contingency and operational SOI must be classified at least?

- a. Top Secret
- b. Secret
- c. Confidential
- d. For Official Use Only

Answer: C Ref: FM 24-35 Chap 1, para 1-6.c

158. If your SOI is lost or compromised, who must you notify through the most expeditious means available?

- a. G/S-2
- b. Signal Officer
- c. Commander
- d. Both a and b

Answer: D Ref: FM 24-35 Chap 1, para 1-7.a

159. After an initial compromise report is submitted, you must submit a written report through the chain of command within \_\_\_\_\_ hours.

- a. 24
- b. 18
- c. 48
- d. 72

Answer: C Ref: FM 24-35 Chap 1, para 1-7.b

160. Which of the following is not usually contained in a SOI?

- a. Index
- b. Signs and Countersigns
- c. Supplemental Instructions
- d. Names of Commanders

Answer: D Ref: FM 24-35 Chap 1, para 1-5.b

161. What radio net is used by the CRC/FACP to control aircraft in the forward area?

- a. Inflight report net
- b. Tactical Air Control Net
- c. Tactical Air Direction Net
- d. Air Force Air Request Net

Answer: B Ref: AFI 13-106 Chap 1.4.4

162. Who normally receives inflight reports from fighters over the inflight report net?

- a. CRC
- b. ASOC
- c. CRE
- d. both a and c

Answer: D Ref: AFI 13-106 Chap 1.4.6



163. TACP/FACs use the \_\_\_\_\_ for the direction and control of aircraft engaged in air support operations.

- a. Tactical Air Control Net
- b. Tactical Air Direction Net
- c. Air Force Air Request Net
- d. TACP Command Net

Answer: B Ref: AFI 13-106 Chap 1.4.5

164. What net is the link between the ASOC and subordinate TACPs for request and coordination of immediate air support?

- a. Command and Control Net
- b. Tactical Air Direction Net
- c. Air Force Air Request Net
- d. TACP Command Net

Answer: C Ref: AFI 13-106 Chap 1.4.3

165. The net used to pass urgent administrative, logistic, and command information between the ASOC and subordinate TACP elements, is the \_\_\_\_\_.

- a. Command and Control Net
- b. Tactical Air Direction Net
- c. Air Force Air Request Net
- d. TACP Command NET

Answer: D Ref: AFI 13-106 Chap 1.4.7

166. Who is the net control station (NCS) for the Air Force Air Request Net (AFARN)?

- a. Division TACP
- b. ASOC
- c. CRC
- d. All of the above

Answer: B Ref: AFI 13-106 Chap 1.4.3

167. How does a vertical antenna radiate?

- a. Bi-directional
- b. Uni-directional
- c. Omni-directional
- d. All of the above

Answer: C Ref: FM 24-18 pg. 3-3

168. How does a horizontal antenna radiate?

- a. Bi-directional
- b. Uni-directional
- c. Omni-directional
- d. All of the above

Answer: A Ref: FM 24-18 pg. 3-3, para 3-4

169. A directional antenna is used to \_\_\_\_\_.

- a. lessen interception by the enemy
- b. lessen interference with friendly stations
- c. concentrate radiation in a given direction
- d. All of the above

Answer: D Ref: FM 24-18 pg. 3-7

170. What is the purpose of the WOD in Have Quick operations?

- a. To synchronize the TOD for frequency hopping.
- b. To program the frequency hop rate and pattern.
- c. To provide a common net number.
- d. To provide a medium to transfer the TOD via hardwire transfer.

Answer: B            Ref: 31R2-2GRC206-1-1 pg. 1-3

171. Upon power up, what does the RSC backlighting default to?

- a. 30 seconds
- b. 1 minute
- c. 5 minutes
- d. 10 minutes

Answer: B            Ref: 31R2-2GRC206-1 pg. 2-84.1

172. How many net numbers in Have Quick are available for wartime use?

- a. 3000
- b. 1000
- c. 16
- d. 5

Answer: A            Ref: T.O. 31R2-2GRC206-1-1 pg. 4-2

173. Which of the following modes allows the operator to load multiple WODs in the PRC-113 and GRC-206?

- a. 220.000
- b. 220.025
- c. 220.050
- d. 220.075

Answer: B            Ref: T.O. 31R2-2GRC206-1-1 pg. 4-3

174. Which of the following entries best describes adding the current operational date to the TOD message, to facilitate emergency-start Have Quick operations?

- a. MWOD Date Verify
- b. Operational Date Entry
- c. Preset Load
- d. FMT Load

Answer: B            Ref: T.O. 31R2-2GRC206-1-1 pg. 4-3

175. Which of the following codes would be displayed while you are loading MWODs?

- a. LC
- b. LP
- c. LF
- d. PASS

Answer: A            Ref: T.O. 31R2-2GRC206-1-1 pg. 4-3

176. Which of the following net numbers access the FMT-net?

- a. A00.100
- b. A01.500
- c. A09.925
- d. A01.425

Answer: D            Ref: T.O. 31R2-2GRC206-1-1 pg. 4-2

177. Concerning Have Quick Operations, the \_\_\_\_\_ places radios in synchronization with all similarly operated radios so they can frequency hop at the same time.

- a. WOD
- b. TOD
- c. ECCM
- d. Net number

Answer: B Ref: T.O. 31R2-2GRC206-1-1 pg. 1-3

178. Which of the following statements is FALSE concerning Have Quick operations?

- a. The radio memory will hold up to 6 days worth of MWODS in memory
- b. It is possible to receive a TOD from a PSN-11 GPS.
- c. You must load the FMT-nets everytime you load the WODs.
- d. Have Quick is not a secure means of transmission

Answer: C Ref: T.O. 31R2-2GRC206-1-1 pg. 1-3

179. If an RSC FAULT light enables on the RT-246 only during transmission, which of the following courses of action would be best?

- a. Check RSC batteries.
- b. Check GEN input power cable.
- c. Have output power checked in the RT-246.
- d. Check fiber optic cable for break

Answer: C Ref: T.O. 31R2-2GRC206-1 pg. 2-84

180. What is the input voltage to the GRC-206 radio communication system?

- a. 12 VDC
- b. 24 VDC
- c. 30 VDC
- d. 22 to 30 VDC

Answer: D Ref: T.O. 31R2-2GRC206-1 pg. 1-5

181. When remoting the radio set control (RSC), what is the expected battery life of the BA-5590/U battery above -30 degrees F?

- a. 10 hours
- b. 20 hours
- c. 50 hours
- d. 90 hours

Answer: D Ref: 31R2-2GRC206-1 pg. 1-5

182. Which of the following radios is/are the VRC-83?

- a. HF
- b. VHF/AM
- c. UHF/AM
- d. both b and c

Answer: D Ref: 31R2-2GRC206-1 pg. 1-2

183. Which of the following is/are the power output, in watts for the VRC-83 in the GRC 206?

- a. 2
- b. 10
- c. 30
- d. all of the above

Answer: D Ref: T.O 31R2-2GRC206-1 pg. 1-21

184. Which of the following is/are the power output, in watts, of the URC-113 HF radio system in the GRC-206?

- a. .5 to 10
- b. 30
- c. 150
- d. 200

Answer: C Ref: T.O. 31R2-2GRC206-1 pg. 1-23

185. The VHF-FM radio that allows you to preset 10 channels and be accessed through the RSC best describes the \_\_\_\_\_.

- a. URC-113
- b. RT-524
- c. VRC-83
- d. RT-246

Answer: D Ref: T.O. 31R2-2GRC206-1 pg. 1-24

186. The \_\_\_\_\_ is connected to the SDU to provide the operator with controls and indicators to operate and monitor locally, or remotely, the radio system functions.

- a. RFO
- b. PSB
- c. RSC
- d. SDU

Answer: C Ref: T.O. 31R2-2GRC206-1 pg. 1-26

187. The \_\_\_\_\_ is used to provide the remote control signals to each radio set.

- a. PJU
- b. PSB
- c. RSC
- d. SDU

Answer: D Ref: T.O. 31R2-2GRC206-1 pg. 1-28

188. The \_\_\_\_\_ is connected to the vehicle power system or may be connected to an auxiliary motor generator.

- a. PJU
- b. PSB
- c. RSC
- d. SDU

Answer: B Ref: T.O. 31R2-2GRC206-1 pg. 1-29

189. What provides an audio interface between the VHF-FM radio set, the SDU, and the KY-57 COMSEC device.

- a. RSC
- b. SDU
- c. VHF-FM(RT-26)
- d. VHF Bite Panel

Answer: D Ref: T.O. 31R2-2GRC206-1 pg. 1-30

190. What is the purpose of the MUTE switch on the RSC?

- a. turns the speaker off during receive
- b. turns the handset off during receive
- c. turns the speaker off during transmission
- d. turns the handset off during transmission

Answer: C Ref: T.O. 31R2-2GRC206-1 pg. 2-8

191. When you select the guard receiver (GD) on the RSC for the UHF-AM it \_\_\_\_\_.

- a. allows you to receive guard frequency in addition to T/R frequency selected on the RSC
- b. allows you to transmit over guard
- c. puts out a DF signal over guard frequency
- d. allows you to transmit and receive guard transmissions

Answer: A Ref: T.O. 31R2-2GRC206-1 pg. 2-10

192. Which of the following is not shown in the status display?

- a. Low battery
- b. Open cable
- c. Fault
- d. Busy

Answer: D Ref: T.O. 31R2-2GRC206-1 pg. 2-14

193. Which of the following is not an audible indicator on the RSC?

- a. Open F/O cable
- b. System Fault
- c. Low battery
- d. Busy

Answer: C Ref: T.O. 31R2-2GRC206-1 pg. 2-15

194. When the vehicle oil pressure drops below vehicle operating limits, the vehicle power is removed except when the power selector switch is in the \_\_\_\_\_ position.

- a. Vehicle
- b. Vehicle override
- c. Auxiliary override
- d. Auxiliary motor generator

Answer: B Ref: T.O. 31R2-2GRC206-1 pg. 2-17

195. What does an E displayed in the monitor/test window on the URC-113 HF radio indicate?

- a. Low input power
- b. Exciter output low (RT-1444 failure)
- c. Invalid frequency
- d. +5VDC failure within the amplifier coupler

Answer: B Ref: T.O. 31R2-2GRC206-1 pg. 2-33

196. Once you select your power source, and turn the PWR-RESET-OFF circuit breaker on the PSB to the PWR position, what is the first item you turn on?

- a. URC-113
- b. RT-246
- c. SDU
- d. VRC-83

Answer: A Ref: T.O. 31R2-2GRC206-1 pg. 2-72

197. On the GRC-206, power is applied to the SDU after its applied to the \_\_\_\_\_.

- a. HF radio subsystem
- b. VHF-FM radio subsystem
- c. VHF-AM radio subsystem
- d. UHF-AM radio subsystem

Answer: B Ref: T.O. 31R2-2GRC206-1 pg. 2-72

198. After you select a preset on the RT-246 VHF-FM radio, how long must you wait (in seconds) before you can select another?

- a. 5
- b. 6
- c. 10
- d. 20

Answer: A Ref: T.O. 31R2-2GRC206-1 pg. 2-84.1

199. For all radio subsystems the \_\_\_\_\_ mode of operation must be enabled for COMSEC operations.

- a. Plain text
- b. squelch
- c. cipher
- d. DF

Answer: B Ref: 31R2-2GRC206-1 pg. 2-91

200. The plain text light will extinguish when the KY-65 is in the plain text mode.

- a. True
- b. False

Answer: A Ref: 31R2-2GRC206-1 pg. 2-89

201. What is/are the indication (s) that the comsec override scenario is selected?

- a. On both RSC's all PT indicators will flash for 2 minutes
- b. On both RSC's all PT indicators will flash for 5 minutes
- c. On both RSC's the back lighting will be lit for 5 minutes
- d. Both b and c

Answer: D Ref: 31R2-2GRC206-1 pg. 2-92

202. What type of battery does the PRC-119 use for main power?

- a. BA-5598/U
- b. BA-5590/U
- c. BA-3030
- d. BA-5038

Answer: B Ref: TM 11-5820-890-10-1 pg. 2-31

203. What is the range of the PRC-119A in medium power?

- a. 400M to 5KM
- b. 7-9KM
- c. 10-14KM
- d. 15-20KM

Answer: A Ref: TM 11-5820-890-10-1 pg. 1-6

204. What is the range of the PRC-119A in high power?

- a. 5-10KM
- b. 7-9KM
- c. 11-15KM
- d. 15-20KM

Answer: A Ref: TM 11-5820-890-10-1 pg. 1-6

205. What type is the PRC-119A HUB battery?

- a. BA-1372/U
- b. BA-5038/U
- c. BA-5800/U
- d. BA-5372/U

Answer: A Ref: CDC 1C451 Vol 3 Chap 3, pg. 3-47

206. What is the frequency range of the PRC-119A?

- a. 25.0000-90.0075
- b. 35.00-75.00
- c. 30.000-87.975
- d. 3.0000-8.9750

Answer: C Ref: FM 11-5820-890-10-1 pg. 1-6

207. What is the FH mode on the PRC-119A used for?

- a. ECCM (frequency hopping operations)
- b. Secure communication
- c. provide word of the day
- d. create ERF

Answer: A Ref: FM 11-5820-890-10-1 pg. 2-35

208. How many presets are available in SC mode in the PRC-119A?

- a. 2
- b. 3
- c. 6
- d. 8

Answer: D Ref: FM 11-5820-890-10-1 pg. 1-4

209. How many presets are available in FH mode on the PRC-119A?

- a. 2
- b. 3
- c. 6
- d. 8

Answer: C Ref: FM 11-5820-890-10-1

210. What type of encryption device is used with the PRC-119A?

- a. KY-68
- b. KY-65
- c. none required, PRC-119A has internal KY gear
- d. KY-57

Answer: C Ref: FM 11-5820-890-10-1 pg. 1-4

211. How do you enable the whisper mode?

- a. Pull volume control knob
- b. Push volume control knob
- c. turn volume control knob clockwise
- d. turn volume control knob counterclockwise

Answer: A Ref: FM 11-5820-890-10-1 pg. 2-5

212. What is the frequency range of the AN/PRC-104 HF radio?

- a. 2.000 to 12.0000 Khz
- b. 2.0000 to 12.0000 Mhz
- c. 2.0000 to 29.0000 Khz
- d. 2.0000 to 29.9999 Mhz

Answer: D Ref: 31R2-2PRC104-1 pg. 1-1

213. What is the power input requirements of the AN/PRC104 HF radio?

- a. 20 to 32 VDC
- b. 22 to 30 VDC
- c. 22.5 to 30 VDC
- d. 22.5 to 28 VDC

Answer: A Ref: 31R2-2PRC104-1 pg. 1-8

214. What is the power output of the AN/PRC-104 HF radio?

- a. .5 to 10 watts
- b. 2 to 10 watts
- c. 20 watts PEP
- d. 150 watts PEP

Answer: C Ref: 31R2-2PRC104-1 pg. 1-8

215. What is the nominal range of the AN/PRC-104 HF radio over land using the 10ft whip antenna?

- a. 10 miles
- b. 100 miles
- c. 1000 miles
- d. unlimited

Answer: A Ref: 31R2-2PRC104-1 pg. 1-2

216. What is the audible indicator for low batteries?

- a. 1 Khz tone in the handset.
- b. sidetone in the handset.
- c. beeping sound in the handset.
- d. clicking sound in handset

Answer: D Ref: 31R2-2PRC104-1 pg. 2-1



217. What is the maximum tune time (in seconds) of the AN/PRC-104 HF radio?

- a. 6
- b. 8
- c. 10
- d. 12

Answer: D Ref: 31R2-2PRC104-1 pg. 2-3

218. During normal operations of the AN/PRC-104, to both transmit and receive voice, you must place the mode selection switch in what position?

- a. D-TR
- b. V-TR
- c. D-RCV
- d. V-RCV

Answer: B Ref: 31R2-2PRC104-1 pg. 1-14

219. How many system status audio indicators are there on the AN/PRC-104 HF radio?

- a. none
- b. 3
- c. 4
- d. 5

Answer: D Ref: 31R2-2PRC104-1 pg. 2-1

220. When field conditions require that voice radio listening silence is imposed, what mode should you place the AN/PRC-104 HF radio?

- a. D-TR
- b. V-TR
- c. D-RCV
- d. V-RCV

Answer: D Ref: 31R2-2PRC104-1 pg. 2-7

221. What indication does the operator have that the AN/PRC-104 is transmitting normally?

- a. sidetone in the handset
- b. clicking sound in the handset
- c. a solid beeping tone in the handset
- d. a short beep at the beginning of each transmission

Answer: A Ref: 31R2-2PRC104-1 pg. 2-1

222. Under emergency conditions, you may use one \_\_\_\_\_ battery to operate the PRC-113.

- a. BB-590 NICAD
- b. BA-5598 Lithium
- c. BA-5590 Lithium
- d. BA-4386 Magnesium

Answer: A Ref: 31R2-2PRC113-1 pg. 51

223. The PRC-113 is compatible with the \_\_\_\_\_ secure voice equipment.

- a. KY-38
- b. KY-57
- c. KYK-13
- d. KY-65

Answer: B Ref: 31R2-2PRC113-1 pg. 52

224. \_\_\_\_\_ indicates low battery power on the PRC-113.

- a. A clicking in the handset
- b. A blinking decimal in the LCD display
- c. A beeping in the handset
- d. LPR displayed in the LCD display

Answer: B Ref: 31R2-2PRC113-1 pg. 37

225. The power output for the PRC-113 is \_\_\_\_\_.

- a. .5 to 10 watts
- b. 2 or 10 watts
- c. 10 watts
- d. 2 watts

Answer: B Ref: 31R2-2PRC113-1 pg. 7

226. You are attempting to enter in a preset and receive a LC-XX prompt. What action should you take to enter a normal preset?

- a. nothing, enter in as normal
- b. enter 220.025 into preset 20
- c. enter 220.000 into preset 20
- d. enter 220.075 into preset 20

Answer: C Ref: 31R2PRC113-1 pg. 18

227. Which connector on the PRC-113 would you attach the special purpose cable from the PSN-11 for TOD transfer?

- a. Remote
- b. Audio
- c. Antenna
- d. None of the above

Answer: A Ref: 31R2-2PRC113-1 pg. 9

228. Which connector on the PRC-113 would you attach the W-2 cable for KY-57 secure operations?

- a. Remote
- b. Audio
- c. Antenna
- d. none of the above

Answer: B Ref: 31R2-2PRC113-1 pg. 52

229. Which keypad entry on the PRC-113 allows you to transmit a TOD signal to another station?

- a. 8/TOD
- b. 9/DF
- c. 0/PST
- d. CLR/HWT

Answer: B Ref: 31R2-2PRC113-1 pg. 16

230. Which of the following is not a source of a TOD signal?

- a. Emergency Clock Start (3) (ENT)
- b. PSN-11
- c. Transmit from another Have Quick capable transmitter
- d. Emergency clock start (8/TOD) (ENT)

Answer: D Ref: 31R2-2PRC113-1 pg. 16-18

231. What is the output power of the PRC-113 when low power is selected?

- a. 5 watts
- b. 10 watts
- c. 3 watts
- d. 2 watts

Answer: D Ref: 31R2-2PRC113-1 pg. 7

232. What two forms are used to perform operator inspections on military vehicles?

- a. DA Form 2404 and AF Form 1830
- b. DA Form 2404 and AF Form 1800
- c. AFTO Form 350 and AF Form 1900
- d. AFTO Form 350 and AF Form 1830

Answer: B Ref: AFM 24-306

233. What is the normal fording depth of the M-998 without a deep water fording kit?

- a. 20 inches
- b. 30 inches
- c. 50 inches
- d. 60 inches

Answer: B Ref: AFTO 36A12-1A-2901-1

234. What is the normal tire pressure of the HMMWV front and rear?

- a. 12 front/16 rear
- b. 18 front/20 rear
- c. 20 front/22 rear
- d. 22 front/24 rear

Answer: C Ref: AFTO 36A12-1A-2901-1

235. What is the fuel capacity of the HMMWV?

- a. 22.5 gals
- b. 24.5 gals
- c. 25 gals
- d. 26 gals

Answer: C Ref: AFTO 36A12-1A-2901-1

236. What is the oil capacity of the HMMWV?

- a. 6qts without oil filter change / 7 qts with filter
- b. 7qts without oil filter change / 8qts with filter
- c. 8qts without oil filter change / 9qts with filter
- d. 9qts without oil filter change / 10qts with filter

Answer: B Ref: AFTO 36A12-1A-2901-1

237. What is the coolant capacity of the HMMWV?

- a. 22 qts
- b. 24 qts
- c. 26 qts
- d. 28 qts

Answer: C Ref: AFTO 36A12-1A-2901-1

238. When driving under blackout conditions and you see two lights on each lamp, what is your distance?

- a. more than 180 feet
- b. less than 180 feet
- c. between 90 and 180 feet
- d. between 60 and 180 feet

Answer: D Ref: AFM 24-306

239. During blackout operations what speed should be maintained?

- a. 5-10 MPH
- b. 5-15 MPH
- c. 10-15 MPH
- d. 10-20 MPH

Answer: A Ref: AFM 24-306

240. Black out driving lights cannot be seen above what height?

- a. 300 ft
- b. 400 ft
- c. 450 ft
- d. 500 ft

Answer: B Ref: AFM 24-306

241. When using the compass assembly with the PVS-7b, the heading is expressed in \_\_\_\_\_.

- a. Grid
- b. Magnetic
- c. True
- d. Polar

Answer: B Ref: 12S10-2PVS7-11 Change 2, pg. 3-17.2

242. The sacrificial window on the PVS-7 is used for?

- a. laser threat environment
- b. fog protection
- c. protection of the objective lens in adverse conditions
- d. eyepiece protection lenses

Answer: C Ref: 12S10-2PVS7-11 Change 2, pg. 3-3

243. NVGs can see through dense smoke?

- a. True
- b. False

Answer: B Ref: 12S10-2PVS7-11 Change 2, pg. 3-2

244. The IR illuminator is visible to other night vision devices?

- a. True
- b. False

Answer: A Ref: 12S10-2PVS7-11 Change 2, pg. 3-14

245. What type of battery does the PVS-7b use?

- a. AA batteries (BA-3058/U) or BA-5567/U lithium
- b. BA-3030
- c. AAA Batteries
- d. BA-5598/U

Answer: A Ref: 12S10-2PVS7-11 Change 2, pg. 2-3

246. The demist shields are to prevent the eyepiece from fogging.

- a. True
- b. False

Answer: A Ref: 12S10-2PVS7-11 Change 2, pg. 1-7

247. A red-light in the left eyepiece means?

- a. low battery
- b. IR illuminator is on
- c. NVG is in operation
- d. overheat condition

Answer: B Ref: 12S10-2PVS7-11 Change 2, pg. 3-9

248. The light interference filter is used in a laser environment.

- a. True
- b. False

Answer: A Ref: 12S10-2PVS7-11 Change 2, pg. 3-17

249. A flashing red-light in the right eyepiece indicates?

- a. low battery
- b. excessive light indicator
- c. goggles need purging
- d. count down to unit shutdown

Answer: A Ref: 12S10-2PVS7-11 Change 2, pg. 3-4

250. The PVS-7b NVG will produce an image even if there is no ambient light?

- a. True
- b. False

Answer: B Ref: 12S10-2PVS7-11 Change 2, pg. 3-1

251. Frontal cover must be at least \_\_\_\_\_ inches thick to stop small arms fire?

- a. 28
- b. 20
- c. 18
- d. 16

Answer: C Ref: FM 21-75 pg. 2-2

252. The primary elements of Combat Power are?

- a. Maneuver, retrograde, protection, and reconnaissance
- b. Converging forces, protection, retrograde, and firepower
- c. Maneuver, firepower, protection, and leadership
- d. None of the above

Answer: C Ref: FM 100-5 pg. 12

253. In basic terms, "maneuver" is movement to put the enemy at a disadvantage.

- a. True
- b. False

Answer: A Ref: FM 100-5 pg. 12

254. Firepower may be \_\_\_\_\_.

- a. direct or indirect
- b. covert or silenced
- c. offensive or integrated
- d. None of the above

Answer: A Ref: FM 100-5 pg. 12

255. Protection conserves the fighting potential of a force so that commanders can apply it at the decisive time and place.

- a. True
- b. False

Answer: A Ref: FM 100-5 pg. 13

256. Army Aviation is capable of \_\_\_\_\_.

- a. providing continuous fires in support of commanders' scheme of maneuver
- b. moving quickly and decisively in and out of holding patterns
- c. Rapid reaction in close, deep, or rear operations
- d. None of the above

Answer: C Ref: FM 100-5 pg. 43

257. Engineers execute mobility, counter mobility, and survivability missions in the forward combat zone.

- a. True
- b. False

Answer: A Ref: FM 100-5 pg. 50

258. Who do you talk to for civil affairs?

- a. S-5/G-5
- b. S-1/G-1
- c. AME
- d. ALO

Answer: A Ref: FM 101-5 pg. 3-11

259. Who can give you the status of fire support?

- a. FSE
- b. EOD
- c. S-2/G-2
- d. S-4/G-4

Answer: A Ref: FM 101-5 pg. 3-26

260. Who do you go to for threat information?

- a. AME
- b. FSO
- c. S-2/G-2
- d. SJA

Answer: C Ref: FM 101-5 pg. 3-4

261. Who can authorize targets in the absence of the commander?

- a. FSCoord
- b. ALO
- c. TACP
- d. S-3/G-3

Answer: D Ref: FM 101-5 pg. 3-6

262. Who can give you the status of fire support?

- a. FSE
- b. EOD
- c. S-2/G-2
- d. S-4/G-4

Answer: A Ref: FM 101-5 pg. 3-26

263. Who do you talk to about JAAT missions?

- a. EOD
- b. Aviation Officer
- c. NGLO
- d. Chemical Officer

Answer: B Ref: FM 101-5 pg. 3-20

264. Who do you go to for threat information?

- a. AME
- b. FSO
- c. S-2/G-2
- d. SJA

Answer: C Ref: FM 101-5 pg. 3-4

265. Who do you see to coordinate SEAD?

- a. FSCoord
- b. Headquarters Commandant
- c. Chaplain
- d. EOD

Answer: A Ref: FM 101-5 pg. 3-26

266. Who is responsible to assist the ALO in mission planning?

- a. CSM
- b. NGLO
- c. TACP
- d. S-1/G-1

Answer: C Ref: FM 101-5 pg. 8-13

267. Which type of plan is for a single military operation?

- a. Operations Plan
- b. Logistics Plan
- c. Campaign Plan
- d. Strategic Plan

Answer: A Ref: FM 101-5 pg. 6-2

268. Which of the following is usually given orally, or in a brief written form, and is used to give preliminary notice of orders to follow?

- a. Warning Order
- b. Campaign Plan
- c. OPLAN
- d. FRAGO

Answer: A Ref: FM 101-5 pg. 7-2

269. Which of the following is **NOT** a characteristic of a good plan?

- a. Is simple
- b. Provides for centralized execution
- c. Accomplishes the mission
- d. Uses existing resources

Answer: B Ref: FM 101-5 pg. 6-1 & 6-2

270. Which of the following planning steps determine specific duties to be performed by your subordinate echelons?

- a. Prepare planning studies
- b. Select course(s) of action
- c. Analyze the mission to determine the tasks
- d. Forecast to determine probable requirements

Answer: C Ref: FM 101-5 pg. 6-4

271. Is it normally deemed too risky to conduct rehearsals for OPLANs because of the risk of compromise?

- a. True
- b. False

Answer: B Ref: FM 101-5 pg. 6-5

272. Which of the following is the preferred method for staff planning?

- a. Create a permanent planning section, or sub-section
- b. Use the existing organization without change
- c. Create a temporary planning committee
- d. None of the above

Answer: B Ref: FM 101-5 pg. 6-5

273. Which of the following would **NOT** reduce planning time?

- a. Promote concurrent planning with different staff sections
- b. Perform planning function for supporting elements
- c. Allocate subordinate echelons time to plan
- d. Use Standard Operating Procedures(SOPs)

Answer: B Ref: FM 101-5 pg. 6-6, 7 & 8



274. Where would a specific function contribution (such as fire support) to the OPLAN be located?

- a. In the staff study matrix
- b. In the unit's SOP
- c. In the FRAGO
- d. In the ANNEX

Answer: D Ref: FM 101-5 pg. 6-2 & pg. G-105

275. In what planning phase are ethical questions of warfare discussed?

- a. Conduct rehearsals
- b. Prepare planning studies
- c. Analyze the mission to determine tasks
- d. Forecast the probable requirements

Answer: B Ref: FM 101-5 pg. 6-4

276. NVGs work only with \_\_\_\_\_.

- a. laser target designators
- b. IR pointers
- c. Laser pointers
- d. Forward looking IR Radar

Answer: B Ref: JP 3-09.3 Chap V-15

277. What is the nomenclature of an air delivered flare that burns bright red or green flames for 30 minutes?

- a. BLU-109
- b. LUU-1/5
- c. LUU-2
- d. MK-24

Answer: B Ref: CDC 1C451 Vol 2, Chap 4, pg. 6

278. What manual provides standardized procedures for Offensive Air Support in the Central Region of NATO?

- a. 5<sup>th</sup> Corps SOP
- b. 1<sup>st</sup> Armored Division SOP
- c. MCM 3-3
- d. Aircen Manual 80-2

Answer: D Ref: Aircen Manual 80-2

279. Which range allows USAF aircraft to employ live munitions?

- a. Baumholder
- b. Hohenfels
- c. Grafenwoehr
- d. Hanau

Answer: C Ref: USAFER 55-45

280. What is the standard CAS request form in the Central Region?

- a. Form 1972
- b. Aircen Form 8001
- c. 9 line
- d. CR FAC Brief

Answer: B Ref: Aircen Manual 80-2

281. What type of ranges are available at Grafenwoehr Training Area?

- a. Combined Arms Live Fire Exercises
- b. A-10 Strafe Range
- c. Full Scale Weapons Delivery
- d. All of the above

Answer: D Ref: USAFER 55-45

282. Which fill device may be used with the KY-65?

- a. KYK-13
- b. KOI-18
- c. Both a and b
- d. None of the above

Answer: C Ref: KAO-154B/TSEC pg. 8

283. What piece of equipment can you connect to the KYK-13?

- a. KY-65
- b. KYK-13
- c. KOI-18
- d. All of the above

Answer: D Ref: KAO-154B/TSEC pg. 10

284. When loading the KY-65 with a KOI-18, what indicates good parity (transfer of fill/variable)?

- a. Sig/Cipher-RCV lamp flashes
- b. Audible alarm stops
- c. double-beep in handset
- d. click in handset

Answer: B Ref: KAO-154B/TSEC pg. 19

285. What indicates an empty storage register on the KY-57?

- a. a beep
- b. a continuous beep
- c. a wavering tone
- d. a constant tone

Answer: D Ref: KAO-168B/TSEC pg. 17

286. Which of the following sites would yield the best communications and longest range?

- a. in a valley
- b. on a dry, sandy hill
- c. near high tension lines
- d. on a small hill in a marshy area

Answer: D Ref: FM 24-18 pg. 4-2

287. When siting radios, which of the following should be avoided?

- a. hills
- b. salt water
- c. fresh water
- d. heavily traveled roads

Answer: D Ref: FM 24-18 pg. 4-3

288. Which of the following is **NOT** an advantage to horizontal polarization?

- a. less likely to pick up man-made interference
- b. suffer lower losses when near dense forests
- c. small changes in antenna location don't cause large variations in field intensity
- d. somewhat less affected by reflections of aircraft flying overhead

Answer: D Ref: FM 24-18 Chap 3, pg. 3-7

289. Which of the following is of primary consideration when choosing a site for communications equipment?

- a. cover
- b. mission
- c. camouflage
- d. obstructions

Answer: B Ref: FM 24-18 pg. 4-1

290. The Chemical Warfare suit can be worn for up to \_\_\_\_\_, unless contaminated at which time it must be exchanged within \_\_\_\_\_.

- a. 21 days, 48 hours
- b. 28 days, 24 hours
- c. 14 days, 24 hours
- d. 28 days, 12 hours

Answer: B Ref: USAFE AGOS ETAC Guide pg. 67

291. The Chemical Warfare mask must be inspected how often when deployed on contingency operations ?

- a. Monthly
- b. bi-weekly
- c. weekly
- d. bi-monthly

Answer: C Ref: USAFE AGOS ETAC Guide pg. 67

292. What are the 3 levels of War ?

- a. Strategic, Simplicity, Mass
- b. Operational, Offensive, Maneuver
- c. Tactical, Operational, Strategic
- d. Unity of Command, Maneuver, Security

Answer: C Ref: J-Pub 3-0 Chap II, pg. 1

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